

CLAIMS

1.- Plasma display panel comprising a transparent front plate and a rear plate that leave between them discharge spaces filled with a gas capable of emitting ultraviolet radiation owing to the effect of discharges, and the walls of which spaces are at least partly coated with a layer of a phosphor composition capable of emitting green, blue or red light, owing to the excitation of the said ultraviolet radiation, characterized in that the phosphor composition capable of emitting green colour consists of at least 80% by weight of a mixture of two aluminates that have a spinel structure of the magnetoplombite type and/or of the β -alumina type, one A in a weight proportion p_A such that 90% is doped with manganese without being doped with terbium and the other B in a weight proportion $p_B = 1 - p_A$ is doped with cerium and with terbium without being doped with manganese.

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2.- Panel according to Claim 1, characterized in that the phosphor composition capable of emitting blue colour is based on a europium-doped aluminate having a spinel structure of the β -alumina type.

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3.- Panel according to claim 1, characterized in that:

- the aluminate A is of general formula $Mn:M1_{1-z}M2_zAl_xO_y$;

- the aluminate B is of general formula $Ce,Tb:M'1_{1-z'}M'2_{z'}Al_{x'}O_{y'}$;

where M1, M'1, M2, M'2 are chosen from the group comprising Ba, Ca, Sr, Mg, Zn, Cd and the mixtures of these elements,

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where $9 < x < 13$, $9 < x' < 13$, $16 < y < 20$, $16 < y' < 20$,

where $0 \leq z < 1$, $0 \leq z' < 1$.

4.- Panel according to Claim 3, characterized in that:

- the aluminate A is of formula $Mn:Ba_{(1-z)}Sr_zAl_{12}O_{19}$, where $0 \leq z < 1$;

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- the aluminate B is of formula $Ce,Tb:MgAl_{11}O_{19}$.

5.- Panel according to Claim 4, characterized in that p_A is between 57% et 63%.

6.- Panel according to Claim 4, characterized in that p_A is between 27% et 33%.